

Girls with Down Syndrome from Birth

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ABSTRACT

The study's goal is to create a unique development chart for girls with Down Syndrome (DS) that will allow parents to track their children's progress from birth to three years old. Normal children in India can use growth charts to track their progress, which are available for both boys and girls. Because growth retardation is typical in children with Down's Syndrome, particular and specialised growth charts are required to track their progress.

KEYWORDS: Down syndrome, trisomy 21, chromosome abnormality.

INTRODUCTION

Down syndrome is one of the most common causes of intellectual disability, and millions of children with Down syndrome suffer from a variety of health problems, including learning and memory problems, Congenital Heart Diseases (CHD), Alzheimer's Diseases (AD), leukaemia, cancer, and Hirschprung Disease (HD). The incidence of trisomy varies by population and is influenced by maternal age. With such a high level of complicated unpredictability, the occurrence of with a prevalence of 1:800, approximately 32,000 newborns are born with Down syndrome. Every year, 25.6 babies are born with Down syndrome in India (the birth rate in the country is 25.6). The most frequent chromosomal anomaly in live-born newborns is Down syndrome, which is also the most well-known congenital aneuploidy linked to impaired physical and mental development. One of the most distinguishing characteristics of Down syndrome is short height. During childhood, increase in stature is a well-known indicator of health. Count is credited with the concept of charting a child's body measurements on a chart to show their growth trend. Every six months, Philibert de Montbeillard calculated his son's height. George Buffon) then released the chart, which covered the period from birth to the age of eighteen. As a result, he created the first height growth curve in his Natural History [1]. The growth curve is a useful graphical tool since it shows the child's size at various ages, as well as their development rate or velocity through time, depending on the slope of the curve [2]. Children with different illnesses known to impair with growth, such as Turner and Down Syndrome, have their own growth benchmarks (DS). Disorder-specific charts are important since growth evaluation is dependent on the development pattern distinctive of these diseases. In India, there are currently no growth charts available for children with Down syndrome. Only a pilot research on Indian boys is now available. Growth charts have the capability to monitor development, discover any differences in growth patterns, assess the measures by encouraging growth and so give encouragement to parents, intervene with specific children, and lastly compile data. As a

result, the current study's goal is to create a development chart for girls aged 0–36 months. Down syndrome is a condition that is unique to Indian children. It's critical to establish. In India, new growth guidelines for children with Down syndrome have been developed, with a rigorous adherence to the guidelines. Selection will be based on their health situation [3]. Health care practitioners can only monitor the growth of individual children with Down syndrome adequately and discover development retarding comorbidities at an early stage if they have such references.

CONCLUSION

One of the most significant tools used in everyday practise is a growth chart that shows the children's general health state. Normal development charts for boys and girls that are particular to Indian youngsters are readily accessible and commonly utilised. We have now constructed a length/height, weight, and head circumference growth chart for boys with DS in our current pilot project as a continuation of growth chart development for boys with DS. We compared the average height of children with Down syndrome to the average height of children without Down syndrome. The population As a result, it can be shown that children with shorter birth lengths had shorter birth lengths. When compared to the mean, DS was -0.3 SD (Standard Deviation). The ordinary children When examining the differences at the age of three, it was found that -1.4 standard deviation Growth restriction is seen, which is most likely due to placental hormones.

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Received date: May 01, 2021; **Accepted date:** May 05, 2021; **Published date:** May 15, 2021

Citation: Mangroie L (2021) Heroes or Villains: Genetic Variations. *Journal of Down Syndrome and Chromosomal Abnormalities* 7:167. doi: 10.4172/2472-1115.21.7.167

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